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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,330

04/10/2006

Patrick J. Maas

CU-7455

7603

26530 7590 04/13/2010
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EXAMINER

BURCH, MELODY M

ART UNIT

PAPER NUMBER

3657

MAIL DATE

DELIVERY MODE

04/13/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,330	Applicant(s) MAAS, PATRICK J.	
	Examiner Melody M. Burch	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 5-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/5/10 has been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of the top and bottom surfaces remaining substantially parallel to one another and the side edges remaining substantially parallel to one another in the V arch and W arch as recited in new claim 12 and helper spring 70 recited in claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Examiner notes that top and bottom surfaces and the side edges of the leaf springs are not substantially parallel. For example, the side edges of the leaf spring in the V arch are not substantially parallel because the sides of a V-shaped arch when extrapolated would intersect with one another. Intersecting lines are not substantially parallel to each other. Examiner notes that reference character "70" is not shown in figure 5 as described in the instant specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Objections

4. Claims 3 and 5-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 2, 4, and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The originally filed specification fails to provide support for the limitation of the top and bottom surfaces remaining substantially parallel to one another and the side edges remaining substantially parallel to one another in the V arch and W arch as recited in new claim 12. Examiner notes that the originally filed specification does not describe the top and bottom surfaces or the side edges of the leaf springs to be substantially parallel. Examiner further notes that top and bottom surfaces and the side edges of the leaf springs are not shown in the drawings to be substantially parallel. For example, the side edges of the leaf spring in the V arch are not substantially parallel because the sides of a V-shaped arch when

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extrapolated would intersect with one another. Intersecting lines are not substantially parallel to each other. The remaining claims are rejected due to their dependency from claim 12.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "the leaf spring" is indefinite. It is unclear to the Examiner as to which leaf spring Applicant intends to refer to since a plurality of leaf springs was previously recited.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 2, 4, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5269497 to Barth in view of US Patent 3248745 to Gunlock and US Patent 6158815 to Sugie et al.

Re: claims 1, 2, 4, and 12. Barth shows in figures 1 and 2 a seat spring assembly comprising: a frame 10,12 having a first and a second frame end with first and second sides connected to first and second transverse frame ends as shown; a plurality of flat

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leaf springs 18 having leaf spring first ends connected to the first frame end and leaf spring second ends connected to the second frame end; each leaf spring having one V arch adjacent the leaf spring first end and one shaped arch adjacent the leaf spring second end; each leaf spring has a substantially flat center portion 32 extending longitudinally and aligned horizontally to define a seating support surface.

Barth is silent with regards to the shaped arch adjacent the second end of the leaf spring being a W arch.

Gunlock teaches in col. 2 lines 22-25 a seat spring assembly wherein each spring has a V arch adjacent a first end of the spring and a W arch adjacent a second end of the spring.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the arch at the opposite end of the leaf spring of Barth to have been a W, as taught by Gunlock, in order to provide a means of achieving a desired vertical deflection of the spring depending on the particular application.

Barth, as modified, is silent with regards to a cross piece and a plurality of coil springs as recited.

Sugie et al. teach in figure 8 the use of a seat spring assembly including a cross piece 24, the cross piece spanning and substantially perpendicularly interconnecting second ends of leaf springs 22, the leaf spring second ends being attached to the cross piece, and a plurality of coil springs, the coil springs connecting the cross piece to a

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frame end 20 to transmit loads from the interconnected leaf springs through the coil springs to the second frame end.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the spring assembly of Barth, as modified, to have included a cross piece as recited and a plurality of coil springs as recited, as taught by Sugie et al., in order to provide added resilience and support to accommodate the seat spring assembly user. As best understood with regards to claim 12, Barth, as modified, shows substantially parallel top and bottom surfaces and side edges to the same extent as Applicant's invention. See 112 rejections above.

Re: claim 4. Alternately, in *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5269497 to Barth in view of Gunlock and Sugie et al. and further in view of US Patent 3156460 to Santillo.

Barth, as modified, as set forth in the rejection above of claim 1 is silent with regards to the helper spring.

Santillo teaches in figures 2 and/or 3 the use of a helper spring 63.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the configuration of the leaf springs of Barth, as

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modified, to have included a helper spring, as taught by Santillo, in order to provide a means of reinforcing the support for the seat.

Response to Arguments

12. Applicant's arguments filed 4/5/10 have been fully considered but they are not persuasive.

Applicant argues that Barth teaches notably narrower leaf springs. Examiner notes that the argument is more specific than the claim language. The claims do not require a certain leaf spring width.

Applicant then argues that Gunlock "never uses language describing a W" shape. Examiner disagrees and emphasizes that the W shape is taught by Gunlock in col. 2 line 24 of the Gunlock reference. Applicant then argues that the springs of Gunlock function differently from the claimed V and W arches. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Examiner maintains that it is Barth in view of Gunlock that teaches the claimed limitation. Barth includes the limitation of the spring members being leaf springs and the limitation of the leaf springs having one V arch on a first side and a shaped arch on the other side. Barth does not show that the shaped arch on the other side is in the shape of a W. Gunlock is used solely for the teaching of a spring member having a V arch on one side

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and a W arch on the other side. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shaped side on the other side of Barth to have specifically been a W arch, in view of the teachings of Gunlock, in order to achieve a certain desired level of resilient support in the seat spring assembly depending on the particular application.

Applicant next argues that the V presented by Gunlock “would not be described as [sic] anyone as an ‘arch’”. Examiner notes that the V arch is already satisfied by the base reference, Barth. Gunlock is used for the teaching of a W arch on the opposite end. As pointed out above, the W arch is mentioned in col. 2 line 24 of Gunlock. Examiner further notes that the argument that the prior art does not teach an arc-bottomed V or W is more specific than the claim language.

Applicant argues that the Sugie reference fails to teach the use of a cross piece or leaf springs. First, Examiner notes that the Sugie reference is not used for the teaching of leaf springs since the base reference, Barth, discloses and shows the recited leaf springs. Second, Examiner reiterates that Sugie is used solely for the teaching of the use of a seat spring assembly including a cross piece 24 spanning and substantially perpendicularly interconnecting second ends of spring support members 22 and for the teaching of the use of coil springs connecting the cross piece to a frame end 20. Applicant argues that no one would combine Sugie's coil springs with Barth to put coil springs at the ends of the leaf springs and to have cross pieces interconnect the ends of the leaf springs. Examiner disagrees because Sugie combined a sheet spring 12 with a cross piece along with coil springs interconnected between the cross piece

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and the frame. The only difference between Sugie and Barth is that the sheet spring in Barth is in the form of rows of flexible leaf springs instead of rows of flexible wires.

Examiner further maintains that the Sugie teachings are combinable with Barth since the combination would result in increased support from the cross-piece and increased resilience from the coil springs.

Finally, with respect to the Isaacs reference and the helper spring limitation, Applicant argues that Isaacs is not directed to a seat base or bottom but instead to a seat back. Examiner notes that nothing in the claim language requires the seat spring assembly to be a seat base or bottom spring assembly. In this regard, the argument is more specific than the claim language. Examiner further notes that the helper spring is not clearly shown in the drawings of the instant invention since element 70 is not found in figure 5 as stated in the instant specification.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb

April 10, 2010

/Melody M. Burch/

Primary Examiner, Art Unit 3657